

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) ~~A current generating circuit~~An electro-optical apparatus, comprising:
 - ~~a power supply terminal having a power supply voltage applied thereto;~~
pixel circuits disposed at intersections of a plurality of scanning lines and a plurality of data lines;
 - a scanning-line drive circuit that selects the scanning lines; and
 - a data-line drive circuit,
 - the pixel circuits having a plurality of types of pixel circuits corresponding to a plurality of primary colors,
 - the data-line drive circuit being provided corresponding to the primary colors,and having a current generating circuit that supplies a current to the data line corresponding to the primary colors,
 - the current generating circuit comprising:
 - a power supply terminal having a power supply voltage applied thereto;
 - a first resistor and a second resistor, one end of each of the first resistor and the second resistor being coupled to the power supply terminal, and a resistance of the first resistor and a resistance of the second resistor being different;
 - a first transistor that allows a current corresponding to a voltage of a gate of the first transistor to flow between a first terminal and a second terminal of the first transistor, the first terminal being coupled to another end of the first resistor, and the second terminal and the gate being coupled with each other; and
 - a second transistor that allows a current corresponding to a voltage of a gate of the second transistor to flow between a first terminal and a second terminal of the second transistor, the first terminal being coupled to another end of the second resistor, and the gate of the second transistor being coupled to the gate of the first ~~transistor~~transistor,
 - further comprising a setting circuit that sets individually a resistance of at least one of the first resistor and the second resistor for each of the primary colors.

2. (Currently Amended) ~~A current generating circuit~~An electro-optical apparatus, comprising:

- ~~a power supply terminal having a power supply voltage applied thereto;~~
- pixel circuits disposed at intersections of a plurality of scanning lines and a plurality of data lines;
- a scanning-line drive circuit that selects the scanning lines; and
- a data-line drive circuit,
- the pixel circuits having a plurality of types of pixel circuits corresponding to a plurality of primary colors,
- the data-line drive circuit being provided corresponding to the primary colors,

and having a current generating circuit that supplies a current to the data line corresponding to the primary colors,

- the current generating circuit comprising:
 - a first resistor and a second resistor, one end of each of the first resistor and the second resistor being connected to a power supply terminal, a resistance of the first resistor and a resistance of the second resistor being different, and at least one of the first resistor and the second resistor being a variable resistor;
 - a first transistor that allows a current corresponding to a voltage of a gate of the first transistor to flow between a first terminal and a second terminal of the first transistor, the first terminal being coupled to the other end of the first resistor, and the second terminal and the gate being coupled with each other; and
 - a second transistor that allows a current corresponding to a voltage of a gate of the second transistor to flow between a first terminal and a second terminal of the second transistor, the first terminal being coupled to the other end of the second resistor, and the gate of the second transistor being coupled to the gate of the first transistor,
- further comprising a setting circuit that sets individually a resistance of at least one of the first resistor and the second resistor for each of the primary colors,~~the current flowing in the first transistor being converted into a non-linear current flowing in the second transistor.~~

3. (Currently Amended) The electro-optical apparatus according to claim 2,
~~current generating circuit according to claim 2, wherein, between the first resistor and the~~
~~second resistor,~~ only the first resistor of the first and second resistors is a variable resistor.

4. (Currently Amended) The electro-optical apparatus ~~current generating circuit~~
according to claim 2, the variable resistor being configured such that a plurality of resistor
devices having predetermined resistances are coupled in series with each other.

5. (Currently Amended) The electro-optical apparatus ~~current generating circuit~~
according to claim 2, the variable resistor being configured such that a plurality of resistor
devices having predetermined resistances are coupled in parallel with each other.

6. (Currently Amended) The electro-optical apparatus according to claim 1,
further comprising: ~~The current generating circuit, wherein, a plurality of the current~~
~~generating circuits set forth in claim 1 are cascade connected, and the current flowing in the~~
~~second transistor of the current generating circuit disposed at a first stage is allowed to flow~~
~~in the first transistor of the current generating circuit disposed at a second stage.~~

a plurality of current generating circuits, which include the current generating
circuit, being dependently connected, a current that flows to the second transistor of one of
the current generating circuits positioned in a front stage flowing to the first transistor of one
of the current generating circuits positioned in a back stage.

7. (Currently Amended) The ~~current generating circuit~~ electro-optical apparatus
according to claim 1, further comprising a D/A conversion circuit that converts digital data
into a current signal indicating a current corresponding to digital data and that allows the
current signal to flow in the first transistor.

8. (Currently Amended) An electro-optical apparatus according to claim 1,
~~comprising:~~
~~pixel circuits disposed at intersections of a plurality of scanning lines and a~~
~~plurality of data lines;~~
~~a scanning line drive circuit that selects the scanning lines; and~~

~~a data-line drive circuit including the current generating circuit set forth in claim 1, and that supplies a current flowing in the second transistor of the current generating circuit to the data lines;~~

~~the pixel circuit, disposed at the intersection between one scanning line and one data line, comprising:~~

the pixel circuit having a capacitor device that stores electrical charge in accordance with the current flowing in the data line when the scanning line is selected by the scanning-line drive circuit; and an electro-optical device in which a current corresponding to an electrical charge stored in a capacitor~~the capacitor~~ device flows when selection of the scanning line is finished.

9. (Canceled)

10. (Currently Amended) The electro-optical apparatus according to claim 1,~~claim 8, further comprising a setting circuit that sets a resistance of the first resistor or the second resistor of the current generating circuit to a desired value.~~

the pixel circuits corresponding to the same primary colors being arranged using the same data line.

11. (Currently Amended) The electro-optical apparatus according to claim 1,~~claim 9, further comprising a setting circuit that sets a resistance of the first resistor or the second resistor of the current generating circuit for each of the primary colors.~~

in the current generating circuit, the current flowing in the first transistor being converted into a non-linear current flowing in the second transistor.

12. (Currently Amended) The electro-optical apparatus according to claim 1, further comprising a designation circuit that designates a resistance to be set by the setting circuit,~~claim 10, further comprising a designation circuit that designates a resistance to be set by the setting circuit.~~

13. (Currently Amended) The electro-optical apparatus according to ~~claim 8,~~ claim 10, further comprising:

a memory that stores digital data defining a grayscale of the electro-optical device;

a control circuit that reads the digital data from the memory; and

a D/A conversion circuit that converts the digital data read by the control circuit into a current signal indicating a current corresponding to the digital data, and for allowing the current signal to flow in the first transistor of the current generating circuit.

14. (Currently Amended) The electro-optical apparatus according to ~~claim 8,~~claim 10, the electro-optical device being an organic electro luminescence device.

15. (Currently Amended) An electronic unit, ~~comprising the electro-optical apparatus set forth in claim 8,~~in which the electro-optical apparatus as set forth in claim 1 is mounted.

16. (Currently Amended) The electro-optical apparatus according to claim 2, further comprising:~~The current generating circuit, wherein, a plurality of the current generating circuits set forth in claim 2 are cascade connected, and the current flowing in the second transistor of the current generating circuit disposed at a first stage is allowed to flow in the first transistor of the current generating circuit disposed at a second stage.~~

a plurality of current generating circuits, which include the current generating circuit, being dependently connected, a current that flows to the second transistor of one of the current generating circuits positioned in a front stage flowing to the first transistor of one of the current generating circuits positioned in a back stage.

17. (Currently Amended) ~~The current generating circuit according to~~The electro-optical apparatus according to claim 2, further comprising a D/A conversion circuit that converts digital data into a current signal indicating a current corresponding to digital data and that allows the current signal to flow in the first transistor.

18. (Canceled)